

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for a proxy front end server in a set of one or more front end servers to transparently provide access to a resources of a resource manager, the method comprising:

receiving from [[the]] a client a resource locator for retrieving [[a]] the resource of a selected resource manager of a set of resource managers disposed within different machines, wherein the resource locator comprises a network address of [[the]] a resource manager and the resource locator is at least partially obscured to hide the network address, wherein access to the resource manager is controlled by the set of one or more front end servers;

de-obscuring the resource locator;

retrieving at least a [[first]] portion of the resource from the resource manager according to the de-obscured resource locator, and a second portion of the resource from a second selected resource manager of said set of resource managers according to based on the de-obscured resource locator; and

providing the resource to the client such that it appears to have originated from the [[proxy]] front end server.

2. (Currently Amended) The method of claim 1, wherein the [[proxy]] front end server comprises a front end manager and a back end manager, the method further comprising:

receiving a first proxy header corresponding to the request, the first proxy header identifying the client as the source of the request and the front end manager as the source of the resource; and

preparing a second proxy header by rewriting the first proxy header so as to substitute the back end manager for the client, and the resource manager for the front end manager;

wherein retrieving at least the portion of the resource from the resource manager comprises the back end manager providing the second proxy header to the resource manager.

3. (Currently Amended) The method of claim 1, further comprising:

receiving a first proxy header corresponding to the request, the first proxy header identifying the client as the source of the request and the [[proxy]] front end server as the source of the resource; and

preparing a second proxy header by rewriting the first proxy header so as to substitute the [[proxy]] front end server for the client, and the resource manager for the [[proxy]] front end server;

wherein retrieving at least the portion of the resource from the resource manager comprises providing the second proxy header to the resource manager.

4. (Currently Amended) The method of claim 3, further comprising:

receiving a third proxy header from the resource manager, the third proxy header identifying the resource manager as the source of the resource, and the [[proxy]] front end server as the recipient of the resource; and

preparing a fourth proxy header by rewriting the third proxy header so as to substitute the [[proxy]] front end server as the source of the resource, and the client as the recipient of the resource;

wherein providing the resource to the client comprises providing the fourth proxy header to the client.

5. (Previously Presented) The method of claim 3, wherein the resource is formatted according to a tag based language.

6. (Previously Presented) The method of claim 5, wherein the tag based language is a selected one of: the HyperText Markup Language (HTML), and the eXtensible Markup Language (XML).

7. (Original) The method of claim 3, wherein the first proxy header comprises a content type identifier identifying a desired format for the resource, and wherein the resource manager stores the resource in a second format different from the desired format, the method further comprising:

converting the resource from the second format to the first format.

8. (Original) The method of claim 1, further comprising:

receiving a content type identifier from the client identifying a desired format in which to provide the resource to the client; and

converting the resource from a different format utilized by the resource manager into the desired format.

9. (Currently Amended) The method of claim 1, wherein ~~the network comprises multiple resource managers providing access to the resource access to one or more other resource managers~~ is controlled by the one or more front end servers, the method further comprising:

retrieving ~~at least another portion[[s]]~~ of the resource from selected ones of the ~~multiple one or more other~~ resource managers.

10. (Currently Amended) The method of claim 9, wherein the portions ~~of the resource~~ are retrieved in parallel from the ~~selected ones of the multiple resource manager and the one or more other~~ resource managers.

11. (Currently Amended) The method of claim 10, further comprising:

determining loads for the ~~multiple resource manager and the one or more other~~ resource managers; and

selecting among the ~~multiple resource manager and the one or more other~~ resource managers according to the loads.

12. (Original) The method of claim 11, wherein the portions are non-overlapping portions of the resource.

13. (Currently Amended) The method of claim 1, further comprising: wherein the resource locator ~~comprising~~ comprises a Uniform Resource Locator (URL); ~~and~~, the method further comprising:

inspecting the [| URL |] resource locator for a path component indicating that the URL comprises ~~the at least partially an~~ obscured portion of the resource locator.

14. (Original) The method of claim 1, wherein de-obscuring the resource locator comprises providing at least the obscured portion of the resource locator to a location manager, and receiving a de-obscured identifier responsive thereto.

15. (Original) The method of claim 14, wherein the location manager performs the validating client authorization to access the resource.

16. (Currently Amended) The method of claim 1, wherein validating client authorization to access the resource comprises providing ~~the at least partially an~~ obscured portion of the resource locator, and an identity identifier for the client to an authorization manager.

17. (Currently Amended) The method of claim 1, wherein validating client authorization to access the resource comprises:

hash-encoding an identity value associated with the client; and
providing the hash-encoded identity value and at least a first portion of the resource locator to an authorization manager configured to look up the hash-encoded identity value and the at least a portion of the resource locator in an access control table.

18. (Currently Amended) The method of claim 1, wherein the client communicates with the [[proxy]] front end server by way of an Internet browser.

19. (Currently Amended) The method of claim 1, wherein the [[proxy]] front end server comprises a front end manager and a back end manager, wherein the client only communicates with the front end manager for obtaining the resource, and wherein the back end manager obtains the resource from the resource manager.

20. (Currently Amended) A system, comprising:

a network communicatively coupling a client, the network including a resource manager providing to provide access to its resources, and a [[proxy]] front end server in a set of front end servers to control access to the resource manager, the front end server comprising a front end manager and a back end manager, wherein the [[proxy]] front end server

is configured to perform a method comprising:

receiving from the client a resource locator for retrieving a resource ~~of a selected resource manager of a set of resource managers disposed within different machines,~~, wherein the resource locator comprises a network address of the resource manager and the resource locator is at least partially obscured to hide the network address;

de-obscuring the resource locator;

retrieving at least a [[first]] portion of the resource from the resource manager ~~according to the de obscured resource locator, and a second portion of the resource from a second selected resource manager of said set of resource managers according to based on~~ the de-obscured resource locator; and

providing the resource to the client such that it appears to have originated from the [[proxy]] front end server.

21. (Currently Amended) The system of claim 20, wherein the [[proxy]] front end server is further configured to perform:

receiving a first proxy header corresponding to the request, the first proxy header identifying the client as the source of the request and the [[proxy]] front end server as the source of the resource; and

preparing a second proxy header by rewriting the first proxy header so as to substitute the [[proxy]] front end server for the client, and the resource manager for the [[proxy]] front end server;

wherein retrieving the resource from the resource manager comprises providing the second proxy header to the resource manager.

22. (Currently Amended) The system of claim 21, wherein the proxy is further configured to perform:

receiving a third proxy header from the resource manager, the third proxy header identifying the resource manager as the source of the resource, and the [[proxy]] front end server as the recipient of the resource; and

preparing a fourth proxy header by rewriting the third proxy header so as to substitute the [[proxy]] front end server as the source of the resource, and the client as the recipient of the resource;

wherein providing the resource to the client comprises providing the fourth proxy header to the client.

23. (Currently Amended) The system of claim 20, wherein the resource locator comprises a Uniform Resource Locator (URL), and wherein the proxy is further configured to perform:

inspecting the [| URL |] resource locator for a path component indicating that the URL comprises the at least partially an obscured portion of the resource locator.

24. (Currently Amended) The system of claim 20, wherein validating client authorization to access the resource comprises:

hash-encoding an identity value associated with the client; and
providing the hash-encoded identity value and at least a second portion of the resource locator to an authorization manager configured to look up the hash-encoded identity value and the at least a second portion of the resource locator in an access control table.

25. (Original) The system of claim 20, wherein the client communicates with the proxy by way of an Internet browser.

26. (Currently Amended) A machine accessible readable storage medium having instructions encoded thereon, which when executed by at least one processor, are capable of directing the at least one processor to perform:

receiving from a client at a front end server in a set of one or more front end servers a resource locator from a client, the resource locator for retrieving a resource of a resource manager, wherein the resource locator comprises a network address of a selected

resource manager of a set of resource managers disposed within different machines and the resource locator is at least partially obscured to hide the network address, wherein access to the resource manager is controlled by the set of one or more front end servers;

de-obscuring the resource locator;

retrieving at least a [[first]] portion of the resource from the resource manager according to the de-obscured resource locator, and a second portion of the resource from a second selected resource manager of said set of resource managers according to based on the de-obscured resource locator; and

providing the resource to the client such that it appears to have originated from the [[proxy]] front end server.

27. (Currently Amended) The medium of claim 26, wherein the [[proxy]] front end server comprises a front end manager and a back end manager, and wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

receiving a first proxy header corresponding to the request, the first proxy header identifying the client as the source of the request and the front end manager as the source of the resource; and

preparing a second proxy header by rewriting the first proxy header so as to substitute the back end manager for the client, and the resource manager for the front end manager;

wherein retrieving at least the portion of the resource from the resource manager comprises the back end manager providing the second proxy header to the resource manager.

28. (Currently Amended) The medium of claim 26, wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

receiving a first proxy header corresponding to the request, the first proxy header identifying the client as the source of the request and the [[proxy]] front end server as the source of the resource; and

preparing a second proxy header by rewriting the first proxy header so as to substitute the [[proxy]] front end server for the client, and the resource manager for the [[proxy]] front end server;

wherein retrieving at least the portion of the resource from the resource manager comprises providing the second proxy header to the resource manager.

29. (Currently Amended) The medium of claim 28, wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

receiving a third proxy header from the resource manager, the third proxy header identifying the resource manager as the source of the resource, and the [[proxy]] front end server as the recipient of the resource;

preparing a fourth proxy header by rewriting the third proxy header so as to substitute the [[proxy]] front end server as the source of the resource, and the client as the recipient of the resource; and

wherein providing the resource to the client comprises providing the fourth proxy header to the client.

30. (Previously Presented) The medium of claim 28, wherein the resource is formatted according to a tag based language.

31. (Previously Presented) The medium of claim 30, wherein the tag based language ~~protocol~~ is a selected one of: the HyperText Markup Language (HTML), and the eXtensible Markup Language (XML).

32. (Original) The medium of claim 28, wherein the first proxy header comprises a content type identifier identifying a desired format for the resource, and wherein the resource manager stores the resource in a second format different from the desired format, wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

converting the resource from the second format to the first format.

33. (Original) The medium of claim 26, wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

receiving a content type identifier from the client identifying a desired format in which to provide the resource to the client; and

converting the resource from a different format utilized by the resource manager into the desired format.

34. (Currently Amended) The medium of claim 26, wherein ~~the network comprises multiple resource managers providing access to the resource access to one or more other resource managers is controlled by the one or more front end servers~~, and wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

retrieving at least another portion[| s |] of the resource from selected ones of the multiple one or more other resource managers.

35. (Currently Amended) The medium of claim 34, wherein the portions of the resource are retrieved in parallel from the selected ones of the multiple resource manager and the one or more other resource managers.

36. (Currently Amended) The medium of claim 35, wherein the instructions comprise further instructions capable of directing the at least one processor to perform:

determining loads for the multiple resource manager and the one or more other resource managers; and

selecting among the multiple resource manager and the one or more other resource managers according to the loads.

37. (Original) The medium of claim 36, wherein the portions are non-overlapping portions of the resource.

38. (Currently Amended) The medium of claim 26, wherein the instructions comprise further instructions capable of directing the at least one processor to perform: the resource locator comprising comprises a Uniform Resource Locator (URL); and, the instructions comprising further instructions capable of directing the at least one processor to perform:

inspecting the [| URL |] resource locator for a path component indicating that the URL comprises the at least partially an obscured portion of the resource locator.

39. (Currently Amended) The medium of claim 26, wherein the instructions for validating client authorization to access the resource comprise instructions capable of directing the at least one processor to perform:

hash-encoding an identity value associated with the client; and
providing the hash-encoded identity value and at least a first portion of the resource locator to an authorization manager configured to look up the hash-encoded identity value and the at least a portion of the resource locator in an access control table.

40. (Currently Amended) The medium of claim 26, wherein the client communicates with the [[proxy]] front end server by way of an Internet browser.

41. (Currently Amended) The method of claim 1, wherein said providing the resource to the client comprises transcoding at least a portion of said ~~retrieved~~ resource ~~received~~ retrieved in a first format into a different second format.

42. (Currently Amended) A method for a proxy front end server in a set of one or more front end servers to transparently provide access to a resources of a resource manager, the method comprising:

receiving [[the]] a client a resource locator for retrieving [[a]] the resource from selected ones of resource managers disposed within different machines, wherein the resource locator comprises a network address identifying at least one of the a resource manager[[s]], and the resource locator being at least partially obscured to hide

the network address, wherein access to the resource manager is controlled by the set of one or more front end servers;

validating client authorization to have the resource locator de obscured access the resource, and if so, de-obscuring the resource locator;

retrieving at least a portion of the resource from said selected ones of said resource managers according to the resource manager based on the de-obscured resource locator, said retrieved portion of the resource having being at least a portion partially encoded in a first format.

43. (Currently Amended) The method of claim [[41]] 42, further comprising:

transcoding at least the portion of the resource encoded in the first format into a different second format.